

Date: Sat, 8 Jan 94 12:39:36 PST  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V94 #14  
To: Info-Hams

Info-Hams Digest                      Sat, 8 Jan 94                      Volume 94 : Issue    14

Today's Topics:

                    Cordless phone freqs?  
    Daily Summary of Solar & Geophysical Activity for 05 January  
                    Got my expiration date - thanx!  
                    Kits and quality  
                    Need U.K. Admin Address  
                    Opening ICOM-R1  
                    Phonecalls from 20,000 fe  
    Ramsey kits not too good -- what about Down East Microwave?  
    Theft/vandalism at radio sites (was Re: Repeater database?)  
                    TOYOTAS AND HAM RIGS  
    Vanity Callsign Notice of Propsed Rulemaking (PR93-305)  
                    When will my license expire?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.  
-----

Date: Fri, 7 Jan 1994 18:42:16 GMT  
From: spsgate!mogate!newsgate!hawk!hawk@uunet.uu.net  
Subject: Cordless phone freqs?  
To: info-hams@ucsd.edu

In article <2gjt2c\$5uj@mailhost.interaccess.com> msf@interaccess.com (MSF) writes:  
>  
>Could someone send me a list of the 10 most common base  
>frequencies, or an ftp site for these freqs?  
>  
>Thanks

46610 46630 46710 46730 46770 46810 46830 46870 46930 46970

George Hawkins  
Motorola Digital Signal Processors  
Semiconductor Products Sector  
6501 William Cannon Drive West  
Austin Texas 78735-8598

Internet: hawk@hawk.sps.mot.com  
UUCP: cs.utexas.edu!oakhill!hawk!hawk  
Motorola Internal Email - R12137  
Phone (512) 891-4543  
FAX (512) 891-2947

Date: Thu, 6 Jan 1994 23:50:34 MST  
From: destroyer!nntp.cs.ubc.ca!alberta!nebulus!ve6mgs!usenet@uunet.uu.net  
Subject: Daily Summary of Solar & Geophysical Activity for 05 January  
To: info-hams@ucsd.edu

## DAILY SUMMARY OF SOLAR GEOPHYSICAL ACTIVITY

05 JANUARY, 1994

(Based In-Part On SESC Observational Data)

## SOLAR AND GEOPHYSICAL ACTIVITY INDICES FOR 05 JANUARY, 1994

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!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 005, 01/05/94
10.7 FLUX=136.9 90-AVG=101 SSN=154 BKI=0111 1002 BAI=002
BGND-XRAY=B4.9 FLU1=6.5E+05 FLU10=1.1E+04 PKI=1112 2212 PAI=005
BOU-DEV=000,006,005,007,005,004,004,018 DEV-AVG=006 NT SWF=02:003
XRAY-MAX= M1.0 @ 0704UT XRAY-MIN= B3.5 @ 0242UT XRAY-AVG= C1.0
NEUTN-MAX= +002% @ 2350UT NEUTN-MIN= -002% @ 2230UT NEUTN-AVG= -0.0%
PCA-MAX= +0.1DB @ 2310UT PCA-MIN= -0.7DB @ 0005UT PCA-AVG= -0.0DB
BOUTF-MAX=55350NT @ 2323UT BOUTF-MIN=55327NT @ 1859UT BOUTF-AVG=55343NT
GOES7-MAX=P:+000NT@ 0000UT GOES7-MIN=N:+000NT@ 0000UT G7-AVG=+078,+000,+000
GOES6-MAX=P:+131NT@ 2053UT GOES6-MIN=N:-057NT@ 0901UT G6-AVG=+100,+024,-027
FLUXFCST=STD:130,130,125;SESC:130,130,125 BAI/PAI-FCST=005,010,010/008,010,015
KFCST=1112 3111 1112 3111 27DAY-AP=006,007 27DAY-KP=2212 2212 2223 3221
WARNINGS=*MAJFLR;*SWF

```

ALERTS=\*\*MINFLR:M1.0/1N@0704,S13W23(7647);\*\*SWEEP:II=2@0710-0723UTC  
!!END-DATA!!

NOTE: The Effective Sunspot Number for 04 JAN 94 was 67.1.  
The Full Kp Indices for 04 JAN 94 are: 1+ 3o 2- 2o 2o 1+ 1o 0+

#### SYNOPSIS OF ACTIVITY

-----

Solar activity was moderate. Region 7646 (S08W26) and Region 7647 (S16W35) combined to produce an M1/1N long duration flare at 05/0704Z. Solar observers detected a Type II radio sweep during this flare. Region 7648 (N06E42) grew larger and produced a C1/SN flare at 05/1545Z.

Solar activity forecast: solar activity is expected to be low to moderate. Regions 7646 and 7648 are growing and becoming more active.

The geomagnetic field has been at quiet levels for the past 24 hours.

Geophysical activity forecast: the geomagnetic field is expected to be quiet to unsettled. The long duration M-class flare may disturb the field beginning late on day two.

Event probabilities 06 jan-08 jan

Class M	50/50/50
Class X	05/05/05
Proton	05/05/05
PCAF	Green

Geomagnetic activity probabilities 06 jan-08 jan

##### A. Middle Latitudes

Active	10/15/15
Minor Storm	05/05/05
Major-Severe Storm	01/01/01

##### B. High Latitudes

Active	10/15/15
Minor Storm	05/05/05
Major-Severe Storm	01/01/01

HF propagation conditions were generally near-normal over all regions. High latitude paths saw periods of minor signal

degradation during the local night hours, with enhanced noise levels also reported in conjunction with this activity. Conditions are expected to remain stable on 06 and 07 January, and become slightly degraded over high latitude paths on 08 January in response to the above-noted flare-related disturbance. If it fails to arrive, near-normal conditions will persist.

# COPIES OF JOINT USAF/NOAA SESC SOLAR GEOPHYSICAL REPORTS

## REGIONS WITH SUNSPOTS. LOCATIONS VALID AT 05/2400Z JANUARY

NMBR	LOCATION	LO	AREA	Z	LL	NN	MAG	TYPE
7645	N12W22	083	0290	FSI	18	048	BETA-GAMMA	
7646	S08W26	087	0610	EKI	12	045	BETA-GAMMA	
7647	S16W35	096	0090	ESO	11	005	BETA	
7648	N06E42	019	0290	DAO	09	016	BETA	
7649	S12W14	075					PLAGE	

REGIONS DUE TO RETURN 06 JANUARY TO 08 JANUARY

NMBR LAT LO

NONE

## LISTING OF SOLAR ENERGETIC EVENTS FOR 05 JANUARY, 1994

BEGIN	MAX	END	RGN	LOC	XRAY	OP	245MHZ	10CM	SWEEP
0343	0344	0345					150		
0558	0600	0601					830		
0645	0704	0725	7647	S13W23	M1.0	1N	54	36	II
0743	0743	0746	7646	S09W15		SF	2300		
0823	0828	0838	7645	N17W08	C2.8	SF	550		
0858	0903	0909	7646	S11W21	C1.9	SF	260		
1106	1106	1107					260		
1321	1329	1332	7648	N04E49	C1.8	SF	300		
1359	1407	1420	7645	N16W11	C1.9	SF	270	38	
1656	1657	1702	7648	N02E47		SF	110		
1754	1801	1803	7646	S10W24	C2.8	1N	140		
2155	2156	2159					430		

## POSSIBLE CORONAL MASS EJECTION EVENTS FOR 05 JANUARY, 1994

BEGIN	MAX	END	LOCATION	TYPE	SIZE	DUR	II	IV
05/0710		0723	S13W23	RSP	M1.0	40	2	

POSSIBLE CORONAL MASS EJECTION EVENTS FOR 05 JANUARY, 1994

-----  
 ISOLATED HOLES AND POLAR EXTENSIONS  
 EAST SOUTH WEST NORTH CAR TYPE POL AREA OBSN  
 NO DATA AVAILABLE FOR ANALYSIS

SUMMARY OF FLARE EVENTS FOR THE PREVIOUS UTC DAY

-----

Date	Begin	Max	End	Xray	Op	Region	Locn	2695 MHz	8800 MHz	15.4 GHz
-----	-----	-----	-----	-----	---	-----	-----	-----	-----	-----
04 Jan:	0021	0025	0029	B7.5						
	0059	0119	0150	C1.2	SF	7649	S10E14			
	0302	0310	0316	C2.4	SF	7645	N14E08			
	0442	0448	0451	C1.0						
	0448	0450	0453		SF	7645	N15E09			
	0629	0639	0655	C1.0	SF	7648	N06E68			
	0630	0631	0649		SF	7645	N13W05			
	0633	0633	0643		SF	7648	N06E65			
	0644	0646	0711		SF	7648	N06E65			
	0715	0752	0852		SF	7648	N06E65			
	0743	0747	0816		SF	7645	N12W05			
	0927	0931	0946		SF	7648	N07E65			
	1258	1305	1341		SF	7648	N03E63			
	1531	1533	1540		SF	7648	N06E62			
	1617	1619	1625		SF	7648	N03E61			
	1923	1924	1935		SF	7645	N15W00			
	1957	2000	2005	B6.0						
	2057	2058	2102		SF	7645	N14E02			
	2203	2212	2228	B6.5						

REGION FLARE STATISTICS FOR THE PREVIOUS UTC DAY

-----

	C	M	X	S	1	2	3	4	Total	(%)
	---	---	---	---	---	---	---	---	---	-----
Region 7645:	1	0	0	6	0	0	0	0	006	(31.6)
Region 7648:	1	0	0	8	0	0	0	0	008	(42.1)
Region 7649:	1	0	0	1	0	0	0	0	001	( 5.3)
Uncorrelated:	1	0	0	0	0	0	0	0	004	(21.1)

Total Events: 019 optical and x-ray.

EVENTS WITH SWEEPS AND/OR OPTICAL PHENOMENA FOR THE LAST UTC DAY

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Date	Begin	Max	End	Xray	Op	Region	Locn	Sweeps/Optical Observations
-----	----	----	----	----	--	-----	-----	-----
04 Jan:	0021	0025	0029	B7.5				III
	0059	0119	0150	C1.2	SF	7649	S10E14	III
	0302	0310	0316	C2.4	SF	7645	N14E08	III
	0442	0448	0451	C1.0				III
	0629	0639	0655	C1.0	SF	7648	N06E68	III
	0715	0752	0852		SF	7648	N06E65	III
	1923	1924	1935		SF	7645	N15W00	III

#### NOTES:

All times are in Universal Time (UT). Characters preceding begin, max, and end times are defined as: B = Before, U = Uncertain, A = After. All times associated with x-ray flares (ex. flares which produce associated x-ray bursts) refer to the begin, max, and end times of the x-rays. Flares which are not associated with x-ray signatures use the optical observations to determine the begin, max, and end times.

Acronyms used to identify sweeps and optical phenomena include:

II	= Type II Sweep Frequency Event
III	= Type III Sweep
IV	= Type IV Sweep
V	= Type V Sweep
Continuum	= Continuum Radio Event
Loop	= Loop Prominence System,
Spray	= Limb Spray,
Surge	= Bright Limb Surge,
EPL	= Eruptive Prominence on the Limb.

\*\* End of Daily Report \*\*

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Date: Sat, 8 Jan 1994 17:39:54 GMT  
 From: netcomsv!netcom.com!dgf@decwrl.dec.com  
 Subject: Got my expiration date - thanx!  
 To: info-hams@ucsd.edu

It turns out this kind of data is available on the internet, and I have had several kind replies extracting the data I need (I'm alive until April, 1997 it turns out).

Anyway, thanx to the helpful people replying and I have learned something new!

73 Dave WB0GAZ

-----  
Date: Sat, 8 Jan 1994 14:59:52 GMT  
From: sdd.hp.com!swrinde!emory!kd4nc!ke4zv!gary@network.ucsd.edu  
Subject: Kits and quality  
To: info-hams@ucsd.edu

In article <9401070753.ZM8853@SALCIUS2> scottm@SALCIUS2.csg.mot.com (Scott F. Migaldi) writes:

>>People, you get what you pay for. As a very good friend of mine once  
>>said; "Pay shit. Get shit."

>

>This attitude amazes me! I can only wonder when the people who have  
>attitudes like this will have their jobs move to Osaka! If a customer pays  
>money they should get the best that they are paying for. I am amazed at  
>what type of crap Americans will put up with from a manufacturer. I deal in  
>the international markets and let me tell you my customers demand the very  
>best and will not except an excuse when something does not work properly.

When there's a 10 to 1 price range, and the customer is paying the bottom price, they'd better expect bottom performance. If they expect the very best, then they'd better expect to pay the premium that requires. I think that's all the poster is saying. It's been my experience that that's a truism, even with Motorola. You people make some very nice, very expensive radios, and you also make some cheap junk.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

-----  
Date: Fri, 7 Jan 1994 23:45:35 GMT  
From: metro!basser.cs.su.oz.au!harbinger.cc.monash.edu.au!yeshua.marcam.com!news.kei.com!eff!news.umbc.edu!europa.eng.gtefsd.com!howland.reston.ans.net!pipex!uknet!cix.@@munni.oz.au  
Subject: Need U.K. Admin Address  
To: info-hams@ucsd.edu

The UK Licensing is now handled by an independent company on behalf of the Radiocommunications authority.

My License tells me to notify Changes of Address to:

The Radio Licensing Centre  
SSL  
PO BOX 884  
Bristol BS99 5LF

alternatively why not ask the RSGB ( equivlt to ARRL )at  
Lambda House  
Cranbourne Road  
Potters Bar  
Herts, EN6 3JE  
Telephone: 0707 59015  
Fax: 0707 45105  
Telex: 9312130923 Ansback RSG

John Newgas G7LTQ in UK / N2UYI in USA  
Packet Address G7LTQ@GB7XDD.#32.GBR.EU  
Internet Address jnewgas@cix,compulink.co.uk

-----  
Date: Sat, 8 Jan 1994 01:58:18 GMT  
From: metro!basser.cs.su.oz.au!harbinger.cc.monash.edu.au!yeshua.marcam.com!  
news.kei.com!sol.ctr.columbia.edu!howland.reston.ans.net!europa.eng.gtefsd.com!  
uhog.mit.edu!news.@munnari.oz.au  
Subject: Opening ICOM-R1  
To: info-hams@ucsd.edu

Anyone know how to take bottom bqattery cover off an R1. Mine is  
"inert" so I suspect that the Nicad battery has expired. I removed  
all visible screws, and the case opens at the top, but the bottom  
won't let go. Any ideas? There is a latch at the bottom that doesn't  
seem to do anything...

-----  
Date: Sat, 8 Jan 1994 00:09:14 GMT  
From: munnari.oz.au!metro!basser.cs.su.oz.au!harbinger.cc.monash.edu.au!  
yeshua.marcam.com!usc!sdd.hp.com!col.hp.com!csn!springsboard!  
alex.lane@network.ucsd.edu  
Subject: Phonecalls from 20,000 fe  
To: info-hams@ucsd.edu

Chris Magnuson writes:

-> .... it is possible to make phone calls from way up high by radio  
-> (check on the kids, etc.). Is this possible to do via a portable  
-> radio?

A number of 2-meter repeaters offer users a phone patch that allows you



to make phone calls through the repeater. Long-distance calls are generally not permitted, although some repeaters will let you dial an 800 number, which'll let you get to a long-distance company.

Of course, this pre-supposes you're a licensed ham with a 2-meter rig.

Cheers...

```
-----  
The SpringsBoard BBS          | "You *can* get here from there."  
Pagosa Springs, Colorado     |  
Alex Lane (303) 264-2339      |  
-----
```

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-----  
Date: 8 Jan 94 14:54:08 GMT  
From: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu  
Subject: Ramsey kits not too good -- what about Down East Microwave?  
To: info-hams@ucsd.edu
```

In article <1994Jan7.140535.5582@mnemosyne.cs.du.edu> lkollar@nyx10.cs.du.edu (Larry Kollar) writes:

>  
>OK, everybody and his dog has run down Ramsey kits. I also heard some  
>unfavorable comments about Hamtronics and their downconverter kits. What  
>about Down East Microwave? They have downconverters in kit form -- has  
>anyone tried tackling one of those?

I've built their 902 MHz transverter, and their 2304 downconverter. They work, but they aren't Heathkits. The LOs are built dead bug style, and the docs aren't very clear at all. I needed the photos in the QST article to figure out parts placement for the transverter. But they did work first time, and no special test equipment was required for tuneup. Of course the transverter is milliwatt power level, and there isn't enough selectivity in the receive front end, but a helical filtered preamp can fix the latter problem, and they sell a power brick that'll fix the low power problem. The 2304 downconverter also needs a preamp. I'd give them an Ok, but note that delivery on the transverter was not prompt. I ordered one at Dayton, and didn't get it until the next Dayton (after I danced on their heads a bit). Their loop yagis are good, but one of the 4 902 MHz ones I've assembled was missing a loop. I made my own out of some stock I had on hand rather than fighting with them to get the missing part.

A couple of notes on Ramsey and Hamtronics. Ramsey has greatly improved their 2 meter and 70 cm transceivers from the original models, but they aren't bargains. Converting commercial surplus will still give you a better radio for less money. Hamtronics has a line of helical filtered preamps that are \*excellent\* for repeater use. Buy assembled and tuned though

because they're nontrivial to get to work right without a good SINADer. On the other hand, their converters suck bigtime. It's nearly impossible to get the LO to both be clean and to start reliably. And after you do, the noise figure is poor. Their transmitting converters are better, but not great. Their receivers and transmitters used to be \*horrible\* with spurs and drift problems. I hear the new models are better, but you still better have a spectrum analyzer at hand when you do the tuneup. I'd say that anything that requires an oscillator should be avoided since Hamtronics doesn't seem to know how to design good ones.

I'd say that if you need a reliable high performance preamp, converter, or transverter, you're best off buying from ARR or SSB Electronics. They're expensive, but they work really well. The ARR preamps have \*no\* protection, so you'll lose one occasionally, but the performance is superb for a \$70 unit. And SSB Electronics transverters can't be beat. (At \$750 a pop they'd \*better\* be good.)

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: 8 Jan 1994 00:12:02 GMT

From: korie!newscast.West.Sun.COM!abyss.West.Sun.COM!sunspot!myers@ames.arpa

Subject: Theft/vandalism at radio sites (was Re: Repeater database?)

To: info-hams@ucsd.edu

In article 2gksi7INNb6r@network.ucsd.edu, brian@nothing.ucsd.edu (Brian Kantor) writes:

>Some years ago, one of our repeaters stopped working. When we got up on  
>the the mountain, we found out why:

>

>Someone had torched the door off the building, stolen all the Motorola  
>and GE repeaters out of the building (demonstrating good taste, they  
>left the RCA repeaters alone). On their way out, just for good  
>measure, they cut the guy wires on the tower. When the storm hit a few  
>days later, 70 feet of H-frame tower blew over the side of the mountain  
>to the desert floor below, taking our antennas and a good portion of  
>our coax with it. The solar panels were smashed beyond repair.

>

>Want to know where our repeaters are now? NOYGDB!

> - Brian

Certainly this can be a problem, but it isn't necessarily limited to

amateur repeaters. A buddy of mine owns several mountain-top sites and manages several more in Southern Cal. He's got a list of tales of mayhem and larceny that has been performed on his sites, often by other commercial radio operators, sometimes even by tenants in his site. A few weeks ago we drove up to up one site 'cause the alarm company called to say the alarm hadn't been set all day. When we got there we discovered that someone had attempted to force their way into one of his buildings. Without revealing too much, I'll say that it is fairly certain it was one of the tenants in the other building in his compound.

---

\* Dana H. Myers KK6JQ, DoD 466 | Views expressed here are \*  
\* (310) 348-6043 | mine and do not necessarily \*  
\* Dana.Myers@West.Sun.Com | reflect those of my employer \*  
\* This Extra supports the abolition of the 13 and 20 WPM tests \*

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Date: Sat, 8 Jan 1994 15:30:04 GMT  
From: sdd.hp.com!swrinde!emory!kd4nc!ke4zv!gary@network.ucsd.edu  
Subject: TOYOTAS AND HAM RIGS  
To: info-hams@ucsd.edu

In article <2gk163\$ku@news.acns.nwu.edu> lapin@casbah.acns.nwu.edu (Gregory Lapin) writes:

>In article <9401071154.AA11626@cmr.ncsl.nist.gov>,  
>Robert Carpenter <rc@cmr.ncsl.Nist.GOV> wrote:  
>>Number 1 on their list of requirements for installation of rigs in Toyotas,  
>>in order for the warrantee to continue is:  
>> "The rig must be FCC Type Approved."  
>>  
>>WHERE DO I BUY FCC TYPE APPROVED HAM GEAR ??????????  
>>  
>>I thought that ham gear was specifically NOT type approved. But then again I  
>>don't intend to buy a Toyota, so it's all academic.  
>  
>All commercial ham gear must be FCC type approved (that's a rule that was  
>changed from when I started in ham radio).

NO, NO, NO. Type approval is very strict, and no ham gear must be type approved. External power amplifiers below 144 MHz must be type \*accepted\*, and commercial ham gear must be type \*certified\*, that's just a manufacturer's affidavit, there may also be a Part 15 certification required if there's a microprocessor on board, but no ham gear has to pass type approval. As far as I know, only certain broadcast equipment must meet type approval regulations. It's very expensive and time consuming.

So Toyota is saying that only broadcast transmitters are permitted.

Heh, I'd like to see our 100 kW Harris fit in a Camry. :-)

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

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Date: 7 Jan 94 16:42:01 -0600

From: swrinde!cs.utexas.edu!howland.reston.ans.net!vixen.cso.uiuc.edu!

moe.ksu.ksu.edu!engr.uark.edu!news.ualr.edu!eieio.ualr.edu!gdm@network.ucsd.edu

Subject: Vanity Callsign Notice of Propsed Rulemaking (PR93-305)

To: info-hams@ucsd.edu

[said NPRM included herein by reference]

A few things perhaps worth noting:

1. They are proposing to charge you \$7.00 per year for the rest of your life for their having issued you a specific callsign. I'd feel a lot better about a one-time charge, even at my age.

2. If your list of ten specific callsigns is exhausted by the time your application makes it through the mill, your existing callsign becomes the eleventh choice and you will be charged \$7.00 per year for the rest of your life for the privilege of continuing to use your old callsign.

3. Opinion: what does "vanity" have to do with requesting a specific callsign? Commercial broadcasters do it all the time. These specific ham callsigns will still have to follow the present formats for the various license classes, unlike the completely free form of so-called "vanity" car tags. I suspect the "vanity car tag" expression was originated by some media type. I don't see the parallel between Lawrence Welk requesting "A1ANA2" for his car and my trying to get, say, K5EE, the shortest (in CW) callsign in the United States.

When I finally became an old-enough timer (at 27) to request a specific callsign all those years ago, I tried to get K5DM or K5GM or some others I can't remember, but the closest they could get was K5DH. If they could set up this new system to be less risky and less costly, I might try again, otherwise "thanks but no, thanks."

73,

Doug K5DH

--

- - - - Doug Mauldin - - - - - University of Arkansas at Little Rock - -  
gdmauldin@ualr.edu | Graduate Institute of Technology  
standard disclaimers apply | Department of Electronics and Instrumentation  
- - - - -

-----  
Date: Sat, 8 Jan 1994 16:57:15 GMT  
From: netcomsv!netcom.com!dgf@decwrl.dec.com  
Subject: When will my license expire?  
To: info-hams@ucsd.edu

I have one of those 10 year licenses, and I can't find the orig., and  
I have the feeling that it will expire before too long. How can I find  
my expiration date? I realize this sounds like an obvious question, but  
after 23 years in ham radio I guess I'm getting senile!

73 Dave WB0GAZ dgf@netcom.com  
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End of Info-Hams Digest V94 #14

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